

5 September 1987

Bernard, Lau, Dome, Jugah, JBS.

35 ml N. Bintulu W of Miri
Road, c. 1 mile

Similajau Forest Reserve

logging concession S P 1

Alt 100 m, 3° 20' N, 113° 25' E

Lowland mixed Dipterocarp
on yellow clay.225 Myristicaceae
Myristica iners Bl

Tree 20 m 45 cm dbh

Bark smooth, flaking; bittered on
under bark red. 2 cm thick

leaves reddish lenticular

Flowers P(5), orange, paniculate

TBK, TW, LF (3)

226

MYRISTICACEAE

Knema ? *percorata*

Tree 18 m x 35 cm dbh
 Fluted base to 2 m
 Bark reddish, very flaky
 turning black
 Under bark red, 1 cm thick

Flowers axillary clusters in
 bracts with dense reddish tomentum
 p 3, woody - hirsute reddish
 brown

TBH, TW, LF. (3)

227

RUBIACEAE *Randia*

Tree 15 m x 25 cm dbh
 fluted to 1 m
 bark grey, powdery, thin < 5 mm
 easily peeled
 Fruits green 32 mm x 35 mm

ovoid , inferior , smooth.

TBK , TW , LF. (3)

228 DIPTEROCARPACEAE

Vatica

Tree 25m x 50cm dbh
 bark smooth , greenish gray
 1 cm thick fine largest fissures
 with few flat lenticles
 u/bark red , wood yellow.

flower P5 , 5-7 mm dia
 reddish - brown tomentum

TBK TW LF (3)

229 EBENACEAE

Diospyros

Tree
 20m x 40 cm dbh

bark, black / brown / silv or
longit fissures flaking, rough
0.5-10 cm thick
u/bark reddish, wood whitish

Fruit (TB) ? spheroid, 30 ^{dia} mm
trans/red tan exterior

TBH, TW, LF, FR (4)

230 BURSERACEAE
Dacryodes

Tree 15 m x 20 cm dbh
bark whitish grey, soft
longitudinal fissures thin ~ 5 mm

Flowers small (1-2 mm) white

TBH, TW, LF (3)

See 240 herb ground

231 Umnaceae Gironniera

Tree 20 m x 25 cm dbh

bark, smooth, greenish-grey
waxy, 5 mm thick, w/bk orangy.Fruit, orange, ovoid
two styles

T BK, TW, LF (FR) (4)

Annonaceae Polyalthia

232 Tree 15 m x 25 cm dbh
fluted at base - 2 mOuter bark corky, brown, fissured,
inner bark yellowish with black
longitudinal, raised markings, pale
thick, > 1 cm, u/bk orange~ 10 free carpels 25 x 15 mm
ovoid, pink with red streaks
longitudinal

T BK, TW, LF, FR. (4)

233

ANNONACEACE

Mezquite

Tree 20m x 90 cm dbh
Bark, thick - 2 cm reddish
longitudinal fissures
Fruits ovoid 55 x 50 mm
slightly flattened
smooth green,

TBR, LF, TW,

(3)

*

Gibbons, 'barking deer'
'peacock' (heard)

6 Sept. 87

234

MORACEAE

Artocarpus odoratissimus

Tree 15 m x 30 cm dbh

Bark, brown, thick (15 mm)
roughly pock-marked & fissured

Fruit dull orange 10 cm dia

Seeds bright orange 15 mm long

TBK, LF., TW, FR(4)

235

FAGACEAE

Castanopsis

Tree 25 m x 80 cm dbh

buttressed to 2 m

bark grey, flaky, vertical
lines of brown lenticels

Fruit , hard 4cm dia green

TBR , LF , TW , FR(4)

236

MYRISTICACEAE

Thesia

Tree 20m x 30cm

Bark reddish brown 5-10 mm
dark red exudate
flaky

Flower P(3)

reddish - brown tomentum

-

TBR , LF , TW. (3)

237

Anacardiaceae

(?) *Albizia*

(Toxic) 'Rongas'

Tree 30 m x 50 cm dbh
bark smooth grey, longitud
fissures

ulb red wood white

Flower greeny-white

Fruit 5 winged (60 mm long)

Fr. ovoid 15 m long

TBK, TW, LF, (3)

238

BOMBACACEAE

Durio

Tree 25 m x 45 cm dbh

bark rough, reddish brown

longitud fissures, 1 cm thick

ulb reddish.

Frnt, spines ~ 1.5m

Fr. 12cm long
orangy
and red.

FR, TBK, LF, TW (4)

239

SAPINDACEAE

Nephelium lappaceum L.

Rambutan

Tree 10m x 20cm dbh
bark reddish brown with small
flakes and tubercles
thin < 5mm, ubk orangy/red

frnt 3cm dia
soft spines ~ 1.5m
pinkish red.

TBK, TW, FR, LF, (4)

240

BURSERACEAE

Dacryodes (cf 230)

FR, pink-red

241

MONIMBIACEAE

Autocampylus ambocephellus

Mentawai

Tree 25-30 m x 40 cm
buttressed to 1 mbark corky, reddish-brown
u/bk spongy yellow;
thick white exudateFr. Orange - 15 cm dia
spherical
seed with orange aril.

TBK, LF, TW, FR. (4)

242

MYRISTICACEAE

*Horsfieldia*Tree 30 m+ x 35 cm dia
bark reddish brown
7 cm thick longitudinal grooves
- thick flaking scales
u/bk brown, red exudate

Fruit orange, seed - 3.5 mm long

TOH, LF, TW (3)

243

EUPHORBIACEAE

Baccaurea

Tree 10m x 15cm dbh

bark greenish grey,

soft peeling, longitudinal stripes

thin, papery, dry.

fruit, flattened spheroid, pink
3 groove 2.5 mm dia

seed with bright black aril

LF, TW, FR (3)

7 SEPT. 87.

244 Tree 10 m x 15 cm dbh
 bark smooth with verticle cracks
 greenish-grey u/b orange, 10 mm
 thick

Fruit 7-8 free carpels
 ovoid 40 x 25 mm, 2 10 mm stalks
 pubescent, orange

ANNONACEAE
 ? *Mitrophan*

TBK, TW, LF, FR (4)

245 Tree, 20 m x 40 cm dbh
 fluted to 1 m

bark with many longit. flatt-
 ened ridges grey-brown
 u/bk red 7 mm thick
 wood yellow
 Fruit reddish brown, tuberculate
 hard, wood, 3.5 m long

ROSACEAE *Parinari*

TBK, TW, LF, FR (4)

246. MORACEAE

Artocarpus integer

Tree 15-20 m x 35 cm dbh

outer bark rough, brown, long
ridges + flakes
inner bark red
under bark orangy
white latex exudate

Fruit cauliflorous, oblong

20 x 10 cm

seeds with yellow pulp and

TBk, TW, LF, FR (4)

247 BOMBACACEAE

Durio

Tree 30 m ± x 65 cm dbh

buttressed to 1-2 m

bark reddish-brown, rough

tuberculate outer band
 corky, flaking
 upbk, red, fibrous, wood: reddish.

Fruits up to 10 cm long
 spherical
 and yellow pulp.

TBK, TW, LF, FR (4)

*
 248 PANORAMICITE

Fraxinethia

5 m climbing up Dune
 Infls reddish brown

HERB

249

FAGACEAE

Castanopsis

Tree 12-15 m x 45 cm dbh
 fluted to 1.5 m
 bark reddish-brown flaking
 5 mm thick, u/bark reddish
 fruit, abundant, mid-green

FR, LF, TW, TBK (4/)

250

SAPINDACEAE

Pometia

Tree 30 m x 40 cm dbh
 buttressed to 1.5 m
 Bark smooth gray, < 5 mm,
 reddish u/bk. rugose
 fruit, round (sometimes) green
 12 mm long

FR TBK, TW, LF (4)

251 MELIACEAE

Tree 30m x 25cm dbh

bark brown (reddish)
10mm thick smooth - powderyup/bk red
white latex
wood red.flower small c 1cm dia bud
on rusty firmose pedicel
yellow-green.

TBH, TW, LF, FL. (4)

252

FAGACEAE
*Lithocarpus*Tree, 35m x 60cm
~~# buttressed 1.5m.~~bark grey, rough, tuberculate
up/bk red 16mm thick

Fruit green, 15 mm dia
dull green

TBK, TW, LF, FR (A)

253

DIPTERO CARPACEAE

Dipterocarpaceae

Tree ~ 40m x 50cm dbh

bark \pm smooth, 1m

bark reddish-brown

large (~1cm dia) corky

lenticels, slightly flaky.

Fruit 2 winged seed

30mm dia, 5 bumps

150mm, red

3 @ 5mm

TBK, TW, LF, FR (A)

8 SEPT. 1988

254

Nephelium

Tree 10 m x 15 cm dbh

Bark smooth, grey

Fruit 5 cm long, red

TBH, TW, LF, FR (4)

255

ULMACEAE

Crotonia

Tree 15 m x 25 cm dbh

Bark light brown, tuberculate
with transverse ridges, 6 mm

thick

Fruit ovoid, 12 mm long

2 styles to 15 mm long

dull orange above

TBH, TW, LF, FR (4)

256

LEGUMINOSAE

Dialium indum var. ...

Tree 35m x 45 cm dbh
buttressed to 1.5mBark reddish-brown, tuberculate
u/bark red. 5-7mm thick
wood red orange-red
bright red exudateFruit obovoid 23 mm long
x 16 mm dia, dark brown
tomentose

TBH, TW, LF, FR (4)

257

FAGACEAE

Lithocarpus

Tree 35m x 80 cm dbh
buttressed to 1.5-2m
o/bark rough, longit fissures & flaking
i/bark red u/bark orange
* green-brown 15mm

Fruit grey-green 40 mm dia
 silky texture

TBK, TW, LF, FR (4)

258 TILIACEAE

Pentace

Tree 35-40 m x 45 cm dbh

Bristled to 1 m

Bark reddish brown / outer 1/6
 corky, flaky w/bk red.
 wood orange-red.

Fruits 5 winged red.

Flowers white 5 mm dia
 dia. ~~5 mm~~ 10 mm

TBK TW, LF (3)

259

DILLENIA ACERIF

Tree 20 m x 35 cm dbh
 Outer bark brown, flaking, light
 fissured; inner bark red
 under/bark yellow, wood dark
 red.

Flower 5 mm diam, P 5
 imbricate deep red outer, yellow
 inner 50 mm diam, fragrant
 yellow; stamens
 purple stamens
 red 7-lobed style

TBK, TW, LF, FL. (A)

260

DIPTEROCARPACEAE

Shorea

Tree 35 m x 40 cm dbh
 buttressed to 1.5 m

Bark smooth, red-brown
with lenticles, longitudinal grooves
u/bk orangy yellow, 10 mm thick

Fr - 3 long ^{10mm} 2 short ^{5mm} wings
green - orangy, fine tomentum
8-10 mm dia spherical

TBH, TW, LF, FR (4)

261 *

Discidium HERB

m 259 - ant plant
yellow runners, w fronds
2-4 cm - pod with silky
seeds, small (1mm dia) yellow

262 FAGACEAE

Lithocarpus

Tree 35 m x 50 cm dbh

bark used to 1 m

Bark rough, grey-brown

tuberculate w small flukes

15 mm thick

u/bk red, wood red

Fructe ^{green} green, silky
conical 10-12 mm dia

TBT, TW, LF, FR 142

263

EUPHORBACEAE

Baccania angulata

Tree 10 m x 20 cm dbh

Bark soft ^{waxy} 20 mm thick

silver outer, yellow under /_h

Fruct 6-sided, waxy

candle-wax red, corky base

070

TBT, TW, LF, FR, (4)

10 SEPT 1987

264 LAURACEAE

cf Phoebe

Tree 15-20 m x 40 cm dbh.

Bark, brown, soft, flaking
u/bk orange 10 mm thick
wood yellow

Flower buds greenish yellow.

3-4 mm dia.

LF, TW, TBH. (3)

265 LEGUMINOSAE

Dahlia

Tree 35 m x 70 cm dbh.
buttressed to 3 m.Bark, silver-gray, scabrid,
+ smooth wood yellow.
u/bk red, red exudate

Fruit 50 x 30 cm
obovoid, pointed, black

TBt, LF, TW, FR (4)

266

VITACEAE

Columela

W. Climber, to 5 m on tree
bines to 10 mm dia.

black when ripe

Leaf → tendrils

Flower P + green, yellow disc
20, Forest margin of road

LF + TW, FR, STM (BK + WD)
(3)

267

FAGACEAE

Lithocarpus

Tree 30 m x 75 cm dbh
buttressed to 1 m

Bark grey to brown,
 smooth with longitudinal
 raised lenticels
 u/bark orange-red, in the
 wood whitish - pale orange
 fruit oval, apiculate
smooth green, glabrous
 20mm x 16 dia.

LF, TBH, TW, FR (4)

268 LOGANIACEAE

strychnos

W. Chimber, stem 2.5 cm
 fruit to 8 cm, green
 obovoid

FR, LF, TW (4)
 SB+SW

Toxic - blow pipe

L. DARLING CORP
 TACOMA WA 98401

Let's see the Rain
 WEATHERPREDICT

269

MYRISTICACEAE

Myristica

Tree 35m x 45cm dbh
 Trunk fluted / buttressed to
 1.5m, Bark dark brown
 flaky ++ 15mm thick
 u/bk. red, with red
 exudate Wood orange-red

Fruit oval 40mm x 30mm
 orange, fissile

TBK, LF, TW, FR (4)

270

APOCYNACEAE

Willughbeia

Woody climber to 5m
 on tree stem to 50 mm dia
 Fruit 8 cm diam, orange

edible pulp. around seeds
milky white latex

STM, TW, LF, FR (4)

271

~~DILLENIACEAE~~ ?

FLACOURTIACEAE

? *Dillenia*

Tree 20m x 20cm dbh

Bark grey, slightly

rough & flaky

u/bk orange 4mm thick

wood yellow - orange

Flower ♂ white

A ♂ white, filaments

very branched hairs

anthers brown

TRK, TW, LF, FL (4)

272

AYWON A CEAR

Fissistigma

Woody climber - 5m
stem - 30mm dia

hooked tendrils

fruits 2-5 free carpels
green 30x20mm and

STM, TW, LF, FR (4)

(33)

11 SEP 87

273 FLACOURTIACEAE

Hydrocaryus

Tree 35 m x 45 cm dbh
 Bark grey smooth, 10 mm thick
 Fruits spheroid 130 mm dia
 velvety dark brown tomentum

TBT, TW, LF, FR (4)

274 OLACIACEAE

Ochama stackys

Tree 35 m x 65 cm dbh
 Trunk buttressed \leq 2m
 Bark, light reddish brown
 smooth or \pm scabrid.

Fruits 3.0 mm dia, when
messaged with milky latex

TBIF, TW, LF, FR, (4)

275

URTICACEAE

Peltandra

Epiphyte

Shrub, 2m x

Flowers on pink receptacle
(minute white perianth)

TW, LF, FL. (3)

276

MYRISTICACEAE

Myristica

Tree 25m x 30cm dbh
Bark dark brown, flaking
w/ bk red with red exudate
14mm thick

wood reddish.

Fruit ovoid 90 x 60 mm
 greenish, ^{yellow,} → orange when ripe

TBK, TW, LF FR (4)

277

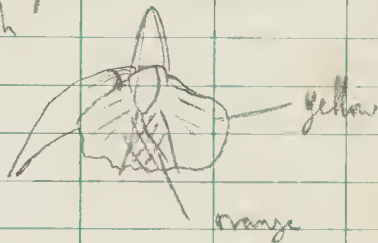
ZINGIBERACEAE

Ochasma / Anomum

Stem to Fru, lvs compound

Fruit oblong 20 x 15 mm
 orange (yellow)

Flowers, on spikes from
 base of plant = 20 mm long
 yellow with
 orange
 stripes



STM, LF, FR, RM/ZONE + (4)
 ROOT

278

MUTIFRAXAR

Meoua

Tree 25m x 30 cm dbh

Bark grey & brown, flaking
+++ & fissured

u/bk red, c. 8mm thick

Flower 40mm dia white

'Fruit' green, 16mm dia
- sticky exudate.

TBR, TW, LF, FR. (4)

279

EBENACEAE

Diospyros.

Tree 20m x 20cm dbh

Bark grey, rough with fine
longitudinal fissures

u/bark orange, 5mm thick

wood yellowish-orange

Fruit flattened spheroid
 80 mm dia, orange
 on brown velvety disk/calyx.
 Seed with purplish gelatinous
 coat.

TBIT, TW, LF, FR. (4)

280 BURSERACEAE

Tree 3.5m x 40 cm dbh

Bark silver-grey, scales
 4-6 mm orange 5 mm thick
 wood white

Flower, (13) C3, white
 fragrant

TBX, TW, LF, FR (4)

281

RUBIACEAE

Woody climber, stem 40 mm dia
to 20 m on 280.
Fruit, orange bitter

TW, LF, STEM (BK + WOOD)
FR (4/31)

282

ELAEOCARPACEAE

Elaeocarpus

Tree 35 m x 70 cm dbh
Trunk buttressed to 2 m
fluted to 4 m
o/Bark reddish-brown
reticulate fissure
inner/bark red } 15 mm
under/bark yellow }

many small punctate (red)
flower 4 mm long

TBHT, TW, LF, FL (4)

12 SEP 1987

283 ROSACEAE

Parastemon

Tree 30 m x 30 cm dbh
 o/Bark grey, flaking.
 u/bark red. 4 mm thick

Fruit obovoid, 8 mm dia.
 green, Flowers greenish-white
 with yellow disk 2-3 mm dia.

TBK, TW, LF, FR (4)

TILIACEAE

284 ~~STERCULIACEAE~~ (PHOTO)*Stroemia javanica*

Tree 35 m x 60 cm dbh
 buttressed to 3 m

Bark reddish brown smooth
 slightly tuberculate, ± fissured
 u/bk. orange, 5 mm thick

Fruit ovoid 75 x 55 mm,
reddish-orange, firmose
endocarp pink seed orange

PHOTO

TBR, TW, LF, FR (4)

285

APOCYNACEAE

Tabernaemontana

Tree 10m x 20cm dbh
Bark light brown, rough
scaly & fissured
copious white latex
u/bark pale orange, 10mm.

Flower bud 20mm long
orange (PHOTO)

Fruit spheroid 130mm dia
orange
mesocarp orange endocarp red

TBR, TW, LF, FR (4)

286

BURSERACEAE

Tree 15m x 25cm dbh

outer bark soft, corky, flaking

inner bark smooth, dark brown

w/bark orangy red 4mm thick

wood white

Fruit, oblong 30 x 20mm
orange coloured with white
latex

TBK, TW, LF, (FR) +

287

DIPTEROCARPACEAE

Vatica

Tree 20m x 25cm dbh

Bark silver-gray with fine

long cracks, w/bk orange-brown

wood silv. with resin

Fruit, rugose, 1.5cm 5 partite

35mm dia.

Flower yellow, A(S) C₂ yellow

TBK, TW, FR, LF. (4)

288 ANNONACEAE

Polysathra.

Tree 25 m x 25 dbh

Bark reddish brown and grey
fine powder scabrid.

ubk light orange 10mm

Flower P6 green, 40mm dia

Fruit vs black, spheroid

25mm dia 4-6 per
axis.

TBK, TW, LF, (3)

289 CELASTRACEAE

Bhesa paniculata

Tree 20m x 30 dbh

of Bark light brown, smooth
or finely tuberculate. 1mm thick
inner bark orange, u/bark
yellow.

Flowers on spikes 1-2mm diam
yellowish green

TBT, TW, LF (3)

19 SEP. 1987

Garrison's mucky rd, North bank
of Sungai Tutuh about 1km
NW. New Base Camp.

Disturbed Aluvial forest,
wet, clay soil.

4° 00' N 114° 50'

(just outside park boundary)

290

Bourourea case

Dacryodes

Tree 15m x 35 dbh

Bark reddish brown ± smooth

6mm thick, wood white

u/bark reddish.

Fruit with purple tinge
green, oblong

25 x 12 mm with yellowish

green (?) glands

white latex from tinge

TBK, TW, LF FR

(24)

291*

MORACEAE

Ficus:

Epiphytic climber on 290

In flower minute white
axillary, no stem hairs
sessile

HERB.

292

POLYGAZACEAE

Xanthophyllum

Tree 10m x 30cm dbh

Bark light grey, thin (3-4mm)
'stringy' ± tuberculateFruit spherical, 15mm dia
green with rusty brown
faintFlowers, minute, 1mm dia
green

TBK, TW, LF, FR (4)

293

MYRISTICACEAE

Gynacantha cf. contracta

Tree 20m x 35cm dbh
reddish brown, slightly flaking, 15mm
u/bk orange, reddish exudateFruit, axillary, green
with orangy 'faint', oval 15mm

TBK, TW, LF, FR (4)

294

LAMNACEAE

Eusideroxylon

Bilim malangensis

Tree 20m x 60cm dbh

Bark dark brown, flaky +++
6mm thick, w/bark orange
wood orange-red, v. hard, denseFruit ellipsoid 90 x 60 mm
glossy green, hard.

TBT: Tw, LF, FR (4)

295

DIPTEROCARPACEAE

Shorea

Tree 25m x 80cm dbh

Trunk buttressed to 2m

Bark reddish brown, flaky
with many light brown corky
pebbles

Leaves c 3mm dia, 20mm long
w/bark red, wood white
inner bark blood red.

Flower - creamy-yellow, 5-6mm
long, C yellow 6-10mm long

TBK, Tw, LF, FL (4)

296 EUPHORBIACEAE

Bumcalendron

Tree 15m x 25cm dbh

Bark brown, ± smooth with
some fine longitudinal fissures
u/bk red, 8mm thick
wood white

Frnt spheroid, green
(distylar), 2 lobes, c. 30mm
dia

TBK, Tw, LF, FR (4)

DARLING CORP
TACOMA WA 98407

Write on the Reverse
WATERPROOF

297

EUPHORBIACEAE

Aparusa

Tree 15 m x 30 cm dbh
 lower trunk gnarled.

Bark reddish-brown +
 stringy or powdery 5 mm thick
 u/bk reddish orange

Flower, yellowish green
 minute 1-2 mm dia P 4

TBKT, TW, LF, FL (4)

298

ANNONACEAE

Polyalthia

Tree 25 m x 60 cm dbh
 trunk fruit to 1.5 m

Bark brown smooth 10 cm
 u/bark orange wood yellow

Fruit *agrostoides*, *stellata*
 , ovoid, 25mm long
 bright red.

TBK, TW, LF, FR (4)

299 STANNICACEAE

Nephelium

Tree 20m x 45cm dbh
 trunk with buttress roots
 to 0.5m - 1m

Bark finely tuberculate
 dark reddish brown 5mm thick
 wk. orange red.

Fruit immature c 10mm
 dia pale green

TBK, TW, LF, FR (4)

20 SEP

Undisturbed Alluvial Forest


300

Goniostylaceae

Goniostylus

Tree 20 m x 40 cm dbh

Bark, dark red, soft
corky with longitudinal fissures
c. 12 mm thick, u/bk orangy
yellow, wood white

Cymes  with
young fruits
P(5) green, fleshy, 8 mm dia
A yellow.

TBK, TW, LF, FL + FR

(4)

301

MELIACEAE

Amorosa

Tree 25m x 55 cm dbh

Bark light grey-brown
slightly flaky with longitudinal
lines of raised lenticels;
10 mm thick u/bk reddish
with white latex; wood redFruit G(3), nuts brown
famine, spheroid 55 mm dia.
white latex

T, TW, LF, FR (4)

302

CELESTRACEAE

Lophopetalum

Tree 20m x 50 cm dbh

Trunk fluted at base to 2m

Bark greyish-brown ± smooth
inner bark yellowish 8 mm

W/ bark orange

K+C

Flower orange with yellow
membranous border to C lobe
10 mm dia, disk, darker orange
+ anthers

musty fragrance

TBK, TW, LF, FL (4)

303

BURSERACEAE

Canarium ?

Tree 30m x 60cm dbh

Trunk buttressed to 1m

Bark reddish-brown

tuberculate & with raised
reticulate patterns, 12 mm thick

W/ bark orange, wood red

Fruits ellipsoid green

TBK, TW, LF, FR (4)

304

SAPOTACEAE

Palagium

Tree 30m x 60cm dbh

diameter 4m at base, to 2m

Bark ^{brown} rough, corky ^{large} flakingw/ bark red, white latex
15-20mm thick

Fruit immature

TBK, TW, LF, FR (4)

21 SEPT

200 m E of New base
camp

305

PANDANACEAE

2-3 m high sparsely
branched waxy leaves

Prop roots to 30 cm

Shrubs at base, stem grey

2.5 cm dia

30 SEPT 1987

MATANG (proposed) NAT PARK

A Bawang, SE Ridge

C. Serapi: summit NNE

Sub Montane forest

on yellow podsol.

sandstone & shales bedrock

2500 ft

1° 32' N 110° 12' E

306 Pandanaceae
(2500')

Pandanus ?

Terrestrial c 1 m tall

under leaves, glaucous green
upper dark green

Fruits immature to 4 cm
long

Herbarium spec

307

THEACEAE

Coendemia / Scheria

Tree 10 m x 15 cm dbh

Bark rough, ^{soft} corky, flaking
reddish 2 mm thick
u/bark thin, yellowish
o/wood yellow

Flower, C subs. cats 20-25 mm
dia creamy white A so
yellow filaments
slightly mottled

Frut (1 only) h.c.d.
reddish-lavender capsule, f. pilose
hinge 15 mm dia, 5 longest
sh. to

TBK -, TW LF (3)

308

MYRTACEAE

Tristania anomala

Tree 8 m - 10 m x 50 cm
Bark, coarse stringy flaking
< 5 mm thick, reddish brown
u/bk yellowish

Flowers greenish
small 1-2 mm
on fl stalk with reddish

~~Branch to center~~

TBK , TW , LF (3)

309

CELESTRACEAE
Lophopetalum

Tree 12 m x 40cm dbh

Bark silver-grey (flaking
20mm thick, pitted
w/bark red.Flower, C5 greenish -
white 10mm dia, singly
A inserted on large (5mm
dia) perigynous disc

TBK TW LF. (3)

310

IXONANTHACEAE

Ixoranthes

Tree 12 x 30cm dbh

Trunk fluted at base to 1m

Bark dark, reddish-brown

10mm thick, rough with
longitudinal reticulate fissures
under bark reddish, of wood white

Fruit, dehiscent, woody

5 valved capsule 25mm

long with persistent calyx

reddish-brown colour

TBK, TW, LF (3)

311

ULMACEAE

Gironiera

Tree 10m x 20cm dbh

Bark light brown, thin
(4mm) ± smooth, slightly
powdery surface
Wbk yellow

Fruit ovoid, orange, 2 styles

TBA, TW, LF, FR (4)

312

EUPHORBIACEAE

Glochidion

Tree 8m x 15cm dbh

Bark reddish brown, slightly

flaking 10mm thick

Wbk red

Flowers P 3+3 greenish.
white with pink tinge
6 mm dia.

TBK, TW, LF, (3)

313 LEGUMINOSAE

Ormosia

Slender treelet 5 m
x 10 cm dbh

Bark finely dissected by cracks
with large (c. 5 mm dia)
winged lenticels brown,
up bark orange-red, thin
< 5 mm. Twigs with brown
tomentum

fruit brown, tomentose
capsule (pod) irregular
dehiscent in 2 valves.

to 3-4 cm long

TBK, TW, LF, (3)

[7+1]

(22)

1 OCT 1987

250 m NW of coll between
 Cr. Bawang and Cr. Serapi
 Slope, with S.W. aspect.
 2200' (near camp.)
 upper M.D.F.

314

THEACEAE

Admanandra

Tree 8m x 15cm dbh
 of Bark reddish brown and ^{gray}
 with many prominent, lenticles
 5mm thick, whitish
 inner bark red, under bark
 yellowish

Flower buds imbricate
 conical, 'spiculate', white

TBH, TW, LF (3)

Col between G Sempu &
G Bawang, SW aspect
edge of clearing 2,200'

315 SAURAUACEAE

Saurauia

Tree 7m x 18 cm dbh.

Bark green h.
n grey with (reddish)
tanta ± smooth with lentic
mic of lenticels.

Fruit spheroid, green
tri-lobed style & persistent
calyx H₂, 10 mm dia
borne on old stem

TBR, LF, Trv. FR (4)

316

THEACEAE

Adiantum cordifolium

Tree 12 m x 30 cm dbh

Bark reddish-brown, (cortex
outer) prominent lenticels
inner bark ^{dark} red, 20 mm thick
w/bark woody-red.Fruit spheroid, ^{15mm} style & calyx
persistent, green, 15 mm dia

+ Flower buds. & flower

25 mm dia. C5 imbricate &

TBK, TW, LF, FR+FL.

* woody, off-white colour (L)

A flattened, reddish, brittle

~

S. side of col

steep gully S. spat.

2,200'

317

FLICOURTIACEAE

Hydrocaryus

Tree 20m x 45 cm dbh
 Trunk fluted / buttressed to 1m
 Bark grey-brown, slightly
 rough

Fruit spherical 30 cm dia
 grey with reddish orange
 rough surface

TBA, TW, FR, LF (L)
 on slope S. aspect

318

DIETROCARPACEAE

Vatica

Tree 25m x 30 cm dbh
 Bark ± smooth, grey to
 patches of flaking orange-red
 - grey outer bark
 inner bark orange-red

u/bark yellow. 10mm thick
 wood yellowish - white.

Fruit 5 merous, spherical,
 15mm dia, scaly orange
 brown surface

(TRK, LF, TW, FR (4))

Flowers minute (c. 1mm dia)
 greenish
 or reddish peduncle

319

MELIACRAR

Bysoxylum

Tree 25m x 50cm dia

Trunk bitressed to 2m

Bark greenish-grey, rough
 pitted.

u/bark whitish with orange
 streaks 15mm thick
 wood yellowish

Fruits 4 nec. s. splashed
10cm dia, bright orange
colored,

TBK, TW, LF, FR (4)

PHOTO

320 LAURACEAE
? *Cryptocarya*

Tree 20m x 50cm dbh

Trunk buttressed to 3m

Bark gray, soft corky
outer layer, 15mm thick.
u/bark reddish.

Flowers, in bud 2mm dia
greenish white panicles

TBK, TW, LF (3)

Fruit obovoid, green

48mm long x 30mm dia

321 LAURACEAE

cf. Phoebe

Tree 20 m x 40 cm dbh

Bark silver-grey, flaking

10 m - thick

w/bark reddish pink
- sticky - exudateFlower, small greenish white
buds (2 mm dia) on waxy
white peduncles

TB/E, TW LR F (4)

322 LORANTHACEAE

Loranthus?

Parasitic on large tree

Flowers red C with long
ie 50 mm dia

narrow processes, 3 HT
long (cf C) narrow orange
remains linear lobes.
Style 20-25mm long red.
peduncle orange

Tw, LF, FL. (4)

STM (Bark + wood)

2 OCT 1987

Disturbed upper MDF
2150', near road
NW of coll between
G. Bawang & G. Serapi.

323

SONNIPATIACEAE

Dialium *moluccana*

Tree 12m x 15cm dbh

Bark silver-grey with
lenticles (~8mm wide) reddish
lenticles,

u/bark reddish tint

Fruit in ^{of} umbel, 114
persistent, style 40mm
long

TBK, TW, LF, FR (4)

324

LOGANIACEAE

*Fagraea*Shrub, 4m x
stem 5cm dia, grey

Flower C (5) ^{sakuriform} _{conulate}
recurved 60 mm dia
tube 40 mm long, white

LF + FL, TW, STM (BH + WD)
(3)

325

RUTACEAE

Eucalyptus

Tree 8 m x 10 cm dbh

Bark light-brown with
longitudinal ridges and
cracks.

up bark reddish-

Fruit, in 4's green, spherical
2-3 mm dia

LF, FBH, TW, (FR)
(3-4)

326

RUBIACEAE

2000'

Nuclea

Tree 10 m x 25 cm dbh
 Bark reddish-brown with
 tomentose indigo of lenticels
 u/bk reddish 8 mm thick
 Flower, 80 mm dia
 globose, yellowish green,
 fragrant, PHOTO

TBK., TW., LF., FL (4)

327

LOGANIACEAE

Fagraea racemosa

Tree 8 m x 7 cm dbh

Bark grey with raised
 longitudinal warty lenticels
 Young twigs 50 mm
 glaucous

Flower campanulate
tube 40 mm, C lobes
35 mm dia, white, waxy
racemose (PHOTO)

Fruit ovoid, 15 mm dia
green with white glands.

TBR, TW, LF, FL+FR.
(4)

328 TMEACEAE SL

Ploiarum

Shrub - disturbed place,
roadside, 1,500'

4m.

Fruit reddish 5-ribbed
capsule, opening 5 loc. f. base
TW, LF, FR+FL, ST Bot (4)

coltd. Flower C 5' white
with pink markings from bud
A so , 30 mm dia

or

DARLING CORE
ALOMA WA 9801

Rose in the Rain
N.S. 1984

14 OCT 1987

Bau: Bidi, 3 km
SSW of Bau township
Steep, rocky limestone cliffs / pmu.
W aspect ± metamorphosed

Alt. 500'

Lat 1°22' N long 110° 7' E

329

LOGAN ACACIA

Fragran.

Tree / shrub 3m⁻⁴ x 10cm
dbh ; growing out of
crack in cliff

Bark grey with raised
lentils
u/bk yellow

Fls green, glabrous
with apiculate apex
35 mm dia, sticky exserted

FR, TW, STM BK, LF, (4)

330 ANACARDIACEAE

Gluta / Melanochyla

Tree 10 m x 20 cm dbh
Bark reddish brown with
large horizontal grooves 5 mm thick
, up/bk reddish

Flower, C5, pubescent
white with yellow center
12-14 mm dia, recurved.

? TOXIC / IRRITANT

TBK, TW, LF, FL (4)

331 OCHNACEAE 800'

Crotonia

Tree 8 m x 20 cm dbh

Bark 10 cm, flaking
w/bk bright yellow

Fruit 5-merous ^{lobed} partite
fused (5) persistent
style persistent 12 mm dia
yellowish green → bluish black
on fleshy receptacle
TBK, TW, LF (3)

332

SAPOTACEAE

650-ft

Palaguan

Tree 10 m x 25 cm dbh
Trunk buttressed to 1.5 m
scaly

Bark grey-brown, flaking
w/bk red, with white
latex exudate, 10 mm thick

Fruit round, orange
up to 20 mm dia TT 373
persistent

Tbk , LF , TW ,

FR

(4)

333

MELIACEAE

500'

Aglia

Tree 8m x 25cm dbh

Bark + smooth, reddish
brown, w/ bark redLenticles in perimeter
of mat red small fls
in axils of leaf scars old wood

Tbk , TW , LF (3)

15 OCT 1987

Jambusan 2-3 km SE
of Bani

limestone cliffs & pinnacles
1/2 way up, 250 ft

334 MELIACEAE

Chrosolobon

Tree 8m x 30 cm dbh.

Bark brown, polished
with small lenticles

u/bk yellowish

Flower cantharone, red
Fruit obovoid, apic white
green with reddish tint

to 30 mm dia

TBT, TW, LF (3)

335 ANACARDIACEAE 300'

Melanorrhoea

Tree 12m x 30cm dbh

Bark brown with pendulous
lentils to 5mm diam
u/bark orange; 8mm thick

Flower green 1mm diam
in bud white latex

TBT, TW, LF, FL (4)
Ragwort Toxic irritant

- base of cliff:

336 RUBIACEAE 200'

Nauclera

Tree 15m x 45cm dbh
Trunk fluted to 1m

NO 211
DAP... ALMA WA 984...
Rt on the line

Bark reddish-brown, flaking
patches; up bark yellow.

Inflorescence globose 30-35 cm
axis fls yellow, style
pinkish 10 mm, fragrant

TBK, TW, LF, FR (4)

337

ANACARDIACEAE

200'

Pentaspador

Tree 18m x 40cm dbh

Bark reddish brown

± smooth, white yellow.

10 mm thick

Fruit oval, pointed apex
green with reddish-brown
spots. 30-35 mm long

TBK, TW, LF, FR (4)

NC 31

338²

PANDANACEAE

250'

Pandanus

2-3 m tall, sparsely branched from base
leaves almost to ground level

HERB ONLY

339

ANNONACEAE

200'

Cyathocalyx

Tree 7m x 20cm dbh
dark

Bark brown ± smooth
w/bk orange, 8mm thick

Flower green, C 5 lobes
up to 6.5mm long, irregular apex

Fr ovoid, pointed, 1/4 Seeded
brown, glaucous 30mm long
TBK, LF, TW, (3)

DARL NC 31
CALIFORNIA WA 9842

Pat. in the Rain
U.S.A. FOREST

340

SAPINDACEAE

Dioscorea

Tree 15 m x 35 cm dbh

Bark brown with small
(1-2 mm) reddish lenticels
slightly rough

7 mm thick w/bk orange

flowers on spike, yellowish
green, 2-3 mm diam

TBK, TW, LF (3)

(403)

17 OCT

Swamp forest 3 km SSW
of Lunder, near Baling
Kayan River 20'
1° 33' N 109° 51' E

341 GUTTIFERAE

Calophyllum

Tree 20 m x 40 cm dbh
Trunk with prop-roots to
1.5 m

Bark reddish brown, soft
woody, flaking w/bark

8 mm thick reddish, sticky &
exudate yellow

Flower white reflexed petals
15 mm dia. A∞ prominent
yellow whorl, fragrant.

TBK, TW, LF, FL (4)

DARWIN UNIVERSITY
A. M. WA 9842
Rising Sun
A. M. WA 9842

342

MYRTACEAE

Myristica

Tree 20m x 30cm dbh

Bark grey-brown with
 longitudinal ridges, inner
 bark red, w/bark orange.
 4mm thick

Flower, in bud, green
 brown granose bud
 scales and stem

TBT, TW, LF, FL (4)

343

ICACINACEAE

Stemonurus

Tree 15m x 25cm dbh

Bark grey, longitudinal

groves & tuberculata
6 mm thick, u/bk orange

Flower - reduced, yellow tube
~~with~~ 5 mm long with
5 feathery stigmas
↳ bigone A

Fruit, banana shaped
4.5 mm long green,

TBT, TW, LF, FL (4)

344

EUPHORBIACEAE

Baccauria brevistylis

Tree 10 m x 15 cm dbh

Bark, red-brown thin
(< 5 mm) flaking.

u/bk red

Flowers minute (2 mm dia),
in fascicles 5-6 enclosed in
yellowish green

TBXI, TW, LF (3)

(418)

18 OCT 87

4 km S Lundu.

345

CUTTIFERAE

Mesua

Tree 18 m x 25 cm dbh

Prop roots to 1 m

Bark grey with fissured
cracks and grooves 5 mm thick
w/ bark orange.

Fruit 2 lobed, scarious
reddish brown, 10 mm dia
style persistent

TBXI, TW, LF (3)

346

OXALIDIACEAE

Woody climber, stem 6 cm
dia.

Flowers on axillary spike
old wood c. 1.5 cm dia green
with dark red top.

STM (BK + WOOD), TW, LF (3)

347

ANNONACEAE

Desmuss

Woody climber, stem 2-3 cm
dia.

Fruit c 6 free carpels on
10 mm long stalk, purple
with glaucous bloom

STM (BK + WOOD), TW, LF, FR
(3-4)

348

SAPOTACEAE

Payaman.

Tree 8 m x 15 cm dbh

Bark brown & grey, tubercul-
ate, 4 mm thick
u/bk orange, white latexaxillary
Fruit, in foursK 4 perianth; style, 10 mm,
purplish, persistent, fr.

ovoid, green 5 mm dia

TBT, TW, LF (3)

349

APOCYNACEAE

(8)

Willoughbia

Woody climber, stem 2 cm
white latex

Flower, saucerform, tube
7 mm, yellow.

Fruit (?) 2 below, 9 cm
long x 3 cm dia green
& yellow.

LF, + TW + STM (BT + WD) (1)

350

LINACEAE

Ctenolophon parviflorus

Litoh

Tree 20m x 25cm dbh

Bark brown with lentic.

Juvenile 1.5 dbh orange 6 mm

Fruit, ellipsoid, perisperm
with persistent 2 lobed
style prominent, 15 mm
long

TBKT, TW, LF (HPC) 3

DARWIN LHP
(A.D.M. WA 382)

Rt. in the Rain
A.S. - ERMO 18

351

GUTTIFEREA

Calophyllum

Tree 8 m x 15 cm dbh

Bark light brown with
 dark brown longitudinal rows
 of lenticels
 inner bark red white orange

Fruit globose, c 10 mm diam
 green with persistent style

TBR, TLV, LF, (FR) (3)

352

FAGACEAE

Lithocarpus

Tree 15 m x 25 cm dbh

Bark grey with reticulate
 grooves
 inner bark red, 4 mm thick

Flower ^{white} on axillary
spikes

TBK, TW, LF (3)

353 ICACINACEAE

? *Gonocaryum* / *Gomphandra*

Tree 25m x 40cm dbh

Trunk fluted to 2m

Bark grey with fine longitudinal
cracks & ± scabrid. 6mm
thick, w/bk orange

Fruit orangy-pink oblong
20mm x 8mm

TBK, TW, LF, FR (4)

(434)

19 OCT 1987

Serayan area ; 10 km

S of Sematan

1° 44' N 109° 45' E

20'

Kerangas forest on white
sand

354

MYRTACEAE

Whiteodendron

Tree 18 m x 45 cm dbh

o/Bark silver-gray, peeling.
inner bark brown

u/bark orange, soft, stringy.

5 mm thick

Fruit ovoid-conical, 6-7 mm dia,
n, style red,

K(5) persistent,

Flower C(5) , white , waxy
30 mm dia

TBK , LF , TW , FR. (4)

355

DIPTEROCARPACEAE

Hopea

Tree 15m x 20cm dbh

Bark mottled grey & brown
slightly rugose

u/bk yellow 4mm thick

Flowers minute 1-2 mm dia
green with reddish tints.

TBK , TW , LF (3)

356

LORANTHACEAE

? Loranthus / Macrosolen

Woody climber, parasite
on Vatica sp. (Dipteris)m | Fl. or enclosed in bright red tugged
bracts, yellow base
fls. orange ^{red} tube 15mm
long C(6)TW, LF, FL, STM (BT + 100)
(4)

357

FAGACEAE

Lithocarpus

Tree 12m x 13cm dbh

Bark grey with longitudinal
& reticulate grooves

u/bk reddish, < 5mm

Flower, spikes of minute
< 1 mm diam, yellow green

TBK, TW, LF, FL (4)

358 DIPTEROCARPACEAE

Shorea

Tree 12m x 16cm dbh

Bark dark-brown, o/bark
flaking; u/bk yellow.
5mm thick

Flower 1-2mm, green

TBK, TW, LF (3)

359

GUTTIFERAE

Miconia

Tree 18m x 25cm dbh

Bark yellowish-brown
flaking, upk orange

8mm thick

Fruit 2 (seed, xanthous
(scarf, pink) rusty -
brown, 2.5mm dia

TBT, TW, LF, FR (4)

360

ANNONACEAE

Tree 13m x 15cm dbh

Bark brown with fine
longitudinal cracks

Flower

K3 3-4 mm dia

C3 green, ^{hirsute} lobes 10-15
mm long, irregular

TBH, TW, LF. (3)

361

SAPOTACEAE

Palagueria

Tree 18 m x 25 cm dbh
darkBark reddish brown, soft
deep longitudinal fissures,
peeling, in

w/bk pinkish red,

white latex exudate

Fruit obovoid, green

15 mm dia

TBH, TW, LF, FR (4)

(463.5)



No 31

DARLING C RP
LACOMA WA 98421

Pat - The Queen
WETA - HERBERT

· NYA - NYA ·